

ABSTRACT OF THE DISCLOSURE

In a gas concentration measuring apparatus, a measurement substrate is provided. A conductive pattern portion is formed in the measurement substrate. The conductive pattern portion includes a signal input pattern constituting the signal processing circuit and electrically connected to the connection terminal, said signal input pattern having direct current impedance with respect to the connection terminal, said direct current impedance being 10 percent or less of the input impedance of the connection terminal; a different potential pattern having a potential difference of 2 V or over from a potential of the signal input pattern; and a guard pattern having a substantially constant potential and a potential difference of less than 0.5 V from the potential of the signal input pattern, said guard pattern being arranged on at least a portion of the measurement substrate, said at least portion of the measurement substrate being located between the signal input pattern and the different potential pattern.